

AMENDMENTS TO THE SPECIFICATION

Amend the heading at page 1, line 1 as follows:

~~Title~~ TITLE OF THE INVENTION

Please add the following headings and paragraphs prior to paragraph [0001]:

CROSS-REFERENCE TO RELATED APPLICATIONS

[000.1] Not applicable.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH
OR DEVELOPMENT

[000.2] Not applicable.

INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON
A COMPACT DISC

[000.3] Not applicable.

REFERENCE TO A "MICROFICHE APPENDIX"

[000.4] Not applicable.

BACKGROUND OF THE INVENTION

(1) Field of the Invention

[000.5] The present invention is directed to an arrangement for
separating excitation light and emission light in a microscope.

(2) Description of related art including information disclosed under
37 CFR 1.97 and 1.98

[000.6] Not applicable.

BRIEF SUMMARY OF THE INVENTION

[000.7] Not applicable.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S)

[000.8] Figs. 1-4 are diagrammatic views of four embodiments of an arrangement for separating excitation light and emission light in a microscope.

DETAILED DESCRIPTION OF THE INVENTION

Amend paragraph [0003] as follows:

In ~~fig.~~ Fig. 1 by means of a mirror SP and a beam splitter ST the light (excitation light) of two lasers L1, L2 having different wavelengths is fed into a common beam path, which is reflected on the side S1 of a vapourized prism in the direction of an AOTF (acousto-optical tunable filter). The excitation light is introduced into the AOTF and light diffracted in the first order for the wavelength set by means of the AOTF control frequency is deflected precisely in the direction of a pinhole PH with upstream and downstream pinhole optics PHO with beam expansion for adjusting the beam profile, whereas other possible wavelengths traverse undiffracted in zero order the AOTF and do not reach the pinhole.

Amend paragraph [00015] as follows:

[00015] In Fig. 4 several such elements, here AOTF and AOM, are advantageously provided in the laser beam path for feeding in of the laser radiation. Here, the radiation of several excitation laser lines L1 - L3 like UV, VIS or IR can be fed in simultaneously or individually into the microscope beam path with an excitation power which can be adjusted independently of each other. The excitation lasers also can be coupled by optic fibers into the scanning module. Viewed in the direction of the microscope optics, the infrared radiation of the infrared-laser (IR) is coupled in first, after which the visible radiation of the visible-laser (VIS) is coupled in and, subsequently, the ultraviolet radiation of the ultraviolet-laser (UV) is coupled into the beam path. Thus, the radiation of the plurality of lasers is successively fed into the microscope beam path in a sequence based on decreasing wavelength when viewed in the direction of the microscope optics.

Page 4, line 1, amend the heading as follows:

~~Patent Claims~~ CLAIMS